### NAVAL WAR COLLEGE Newport, R.I.

Command and Control of the First Modern Campaign; The German Invasion of Denmark and Norway - April, 1940

by

Robert W. Strahan LtCol, USMC

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College of the Department of the Navy.

	7.
MARINE STATE OF THE STATE OF TH	to a server exert companies
Argovern in	The release:
· Thursday	Carrocal and

Delles

5 May 1998

## REPORT DOCUMENTATION PAGE

1. Report Security Cla	assification: UNCLASSI	FIED			
2. Security Classifica					
3. Declassification/Downgrading Schedule:					
4. Distribution/Avail:	ability of Report: DI PUBLIC REI	STRIBUTION STATEMENT A: APPLEASE; DISTRIBUTION IS UNLIMI	PROVED FOR		
5. Name of Performing	Organization:				
5. Name or Performing	JOINT	MILITARY OPERATIONS DEPARTME	ENT		
6. Office Symbol:	С	7. Address: NAVAL WAR COLLE 686 CUSHING ROA NEWPORT, RI 02	<b>D</b> ·		
8. Title (Include Section UNCLASSIFIED - Communication The	nand and Control of	: the First Modern Campaigr Denmark and Norway - Apri	n; L1, 1940 - UNCLASSIFIED		
9. Personal Authors:					
LtCol Robert W. Strahan, USMC  10.Type of Report: FINAL 11. Date of Report: May 1998					
	FINAL	<b>8</b> •			
12.Page Count: 35 (in	ncluding diagrams,	tables, maps, notes and bi	ibliography)		
esticfaction of the	requirements of the J nal views and are not	tted to the Faculty of the N MO Department. The contents necessarily endorsed by the	or this paper		
14. Ten key words tha	t relate to your pape	r:			
Norway, Denmark, Germany, Scandinavia, World War II, Invasion, Command and Control, Joint Operations, Maritime Operations, Peripheral Campaign					
15.Abstract:					
The German invasion of Norway and Denmark in April, 1940, was the first example of a modern campaign with integrated land, air and navy forces. The invasion was successfully executed without distracting forces from the pending invasion of Western Europe in May. It was also conducted in an environment of British naval superiority.  The paper focuses on the command and control relationships established by the Germans to accomplish the mission within the constraints listed above. It analyzes the decisions made during planning, their effectiveness during execution, provides conclusions, and suggests lessons learned for joint command and control that are relevant today.					
16.Distribution /	Unclassified	Same As Rpt	DTIC Users		
Availability of Abstract:	x				
17.Abstract Security Classification: UNCLASSIFIED					
18.Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT					
19.Telephone: 841-64	161	20.Office Symbol:	c CONTED 1		
	Classification of m	This Page Unclassified	DTIC QUALITY INCOCUTED 1		
Securit	y crassification of i	TILD FAGE VIII AND TEACH			

### Abstract of:

### Command and Control of the First Modern Campaign; The German Invasion of Denmark and Norway - April, 1940

The German invasion of Norway and Denmark in April, 1940, was the first example of a modern campaign with integrated land, air and navy forces. The invasion was successfully executed without distracting forces from the pending invasion of Western Europe in May. It was also conducted in an environment of British naval superiority.

The paper focuses on the command and control relationships established by the Germans to accomplish the mission within the constraints listed above. It analyzes the decisions made during planning, their effectiveness during execution, provides conclusions, and suggests lessons learned for joint command and control that are relevant today.

## Table of Contents

Preface	1 .
Background	2
Initial Planning	5
Detailed Planning	7
Execution	23
Conclusions	25
Lessons Learned	27
Epilogue	28
Notes	29
Bibliography	31
List of Maps	
Map 1: Range of German Air from Bases in Norway	4
Map 2: German ports of embarkation in Germany and objectives in Denmark	11
Map 3: German ports of embarkation in Germany and objectives in Norway	12
List of Tables and Diagrams	
Table 1: Objectives and Assigned Forces for Weserubung	9
Chain of Command for Weserubung	14
Luftwaffe Chain of Command	16
Luftwaffe Chain of Command for Weserubung	17
Navy Chain of Command	19
Navy Chain of Command for Weserubung	20
Army Chain of Command for Weserubung	22
Table 2: List of Command and Control Decisions during Weserubung	Appendix A

## Command and Control of the First Modern Campaign; The German Invasion of Denmark and Norway - April, 1940

### **Preface**

Although the war in Europe began with the 1939 German invasion of Poland, fighting between the Germans and Allies was initially limited to a maritime campaign. On April 9th, 1940 when the Germans simultaneously invaded Denmark and Norway, the war dramatically escalated by involving neutral states and in the case of Norway, leading to direct ground combat between German and Allied troops. Denmark fell the first day, but fighting was still heavy in Norway when, in May, the Germans invaded Western Europe (Operation Fall Gelb). The invasion of France and Belgium was the main effort of the Germans. The French and British did not have the capability to defend Europe as well as contest Scandinavia. The result was the Allied withdrawal from Norway by June and the subsequent capitulation of Norwegian forces. The Germans were able to completely control Norway in a 60 days.

As the first modern example of ground, air and maritime forces being employed in a coordinated fashion, the campaign to invade Norway and Denmark could be studied in a variety of ways. This paper will examine the operational function of command and control. Space will not allow a comparison of the German command and control to the Allied system during the counterattacks, or a comparison to how the Germans adapted their command and control in later campaigns. It will focus only on the German command and control relationships during the planning and execution of the invasion of Norway and Denmark.

Why focus on command and control relationships? First, it is the foundation of fighting jointly. The Goldwater-Nichols Act recognized the importance of a joint structure that facilitates unity of command when it codified the authority of the various Commander in Chiefs. When designing a campaign or operation, one of the first operational decisions to be made is who is going to be the Joint Task Force Commander and whether the structure will be made up of service or functional components. Some forces will be commanded by, and other forces will be in support of the Joint Task Force. The clarity of those relationships can either facilitate or frustrate

effective integration and synchronization of those forces. The second reason to focus on command and control is because it is the area most affected by the pressures of bureaucratic politics and individual interests.

Why use Norway? Norway provides for an examination of command and control for geographically separate objectives within the campaign, up to the relationship between the theater commander and the Commander in Chief (Adolph Hitler). Relationships between land, maritime, air (and airborne) components are relevant for study. Secondly, it also provides for a discussion of the relationship between the military and political authorities. Lastly, Norway was an "ad hoc" structure built specifically for a peripheral campaign. The joint glossary discourages the use of the word "peripheral" and the definition of "limited" is not adequate to describe this campaign, so an explanation of what is meant by peripheral is necessary. A campaign may be peripheral by reason of objective, geography or means. In the case of Norway the objectives and geography were not peripheral, but because the German and Allied focus was on Western Europe, the campaign was peripheral in the sense that both sides limited their forces used. Peripheral contingencies, for which there is no existing plan, will demand the speedy establishment of an "ad hoc" joint task force. Those responsible for designing the component relationships will find the German decision process instructive.

### Background

Objectives. For the Germans, Norway was strategically important for two major and one minor reason. The *first* major reason was the need for high grade iron ore. In 1937, 2/3 of German ore came from imports, <sup>1</sup> and 45 percent of imports came from Sweden (or 30 percent of total German needs). Forty six percent of that ore was transported by rail to the port of Lulea (icebound for four months per year<sup>2</sup>) and other Swedish Baltic ports. The remaining fifty four percent went via the Norwegian Atlantic port of Narvik. <sup>3</sup> The *second* major reason was the desire for Atlantic ports and airfields. Since the German coastline is small and opens onto the North Sea, it is relatively easy for the British to conduct a close blockade. Access to sea (primarily submarine) and air bases in Norway has a two effects on the strategic situation. The

British are enveloped on the North, giving the Germans the ability to interdict their Northwest approaches by subsurface, surface and air attacks. The range of land based German air also forces the British to establish a "distant" blockade (see Map 1 on page 4). The *minor* objective was the desire to cut off Norwegian food exports to Britain.<sup>4</sup>

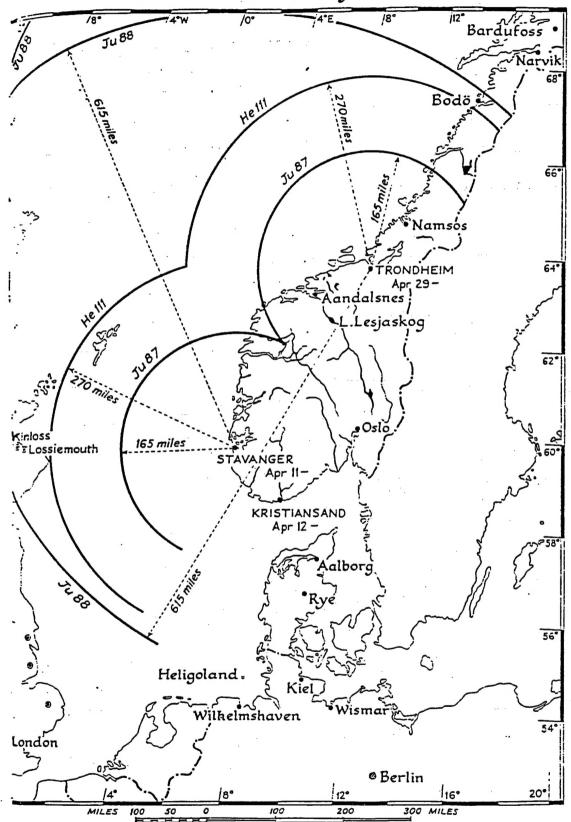
The German situation. The Germans had just completed the Polish Campaign and had the advantage of a well tested doctrine for the use of coordinated ground and air forces. Their disadvantage was the lack of sea power, when compared to the British. Hitler preferred Norwegian neutrality, but recognized that because of German naval inferiority he did not have the ability to defeat British and French forces if they occupied Norway first. Hitler therefore made the decision to conduct a surprise preemptive invasion only if British and French intervention was imminent. The Germans continued to diplomatically stress their desire for Scandinavian neutrality, while at the same time, used the example of Poland as intimidation.<sup>5</sup>

The Norwegian and Danish situation. The Danish and Norwegians assumed that Germany would respect their neutrality as they did in the First World War. (There was a non-aggression pact in place between Germany and Denmark.) The assumption of neutrality, in addition to other economic and political factors, led to the failure of both countries to mobilize their armed forces. In April of 1940, the Norwegians had 13,000 men under arms, and the Danish had 14,550. On the positive side, the Norwegian Navy was on full alert, and Norwegian soldiers, if activated in time, were tough.

Allied situation. The British strength was its Navy. The British weakness was their inability to convince the Norwegians to allow them to occupy parts of Norway. The French were in the same situation as the British and the two countries were actively working together to develop a solution. They tried to use the Finnish War with Russia as a ruse for basing troops in Northern Norway and Sweden. When that war ended, the opportunity for stationing allied troops in Scandinavia was lost. That meant that the allies were either forced to violate Norwegian neutrality or be reactive to German initiatives.

## GERMAN AIR OPERATIONS IN NORWAY

Bomber Limits & Fighter Bases



### **Initial Planning**

"The Norwegian plan was broached to Adolph Hitler for the first time on 10 October 1939 by the commander in chief navy, Grand Admiral Erich Raeder," because the primary objectives of a Scandinavian campaign were maritime. Many officers in the navy were influenced by the writings of Admiral Wolfgang Wegener, who argued that the lack of access to the Atlantic was a disadvantage in World War I. Raeder had directed a staff study of the problem on 3 October and received a supportive recommendation from Admiral Karl Doenitz, Commander in Chief, Submarine Forces, on the 9th. It was Raeder who arranged for the December 14th and 18th meetings between Hitler and the Norwegian traitor, Vidkun Quisling. Quisling convinced Hitler to consider invading Norway by detailing British plans to occupy Norway under the cover of assistance to Finland. He also encouraged Hitler by overstating the influence of the Nazi party in Norway and the possibility of a peaceful coup led by himself.

Hitler's preferred coarse of action was still Norwegian neutrality, but the December meetings caused him to seriously consider a second option of a "peaceful" occupation and a worst case option of an invasion. On 14 December, Hitler directed the Wehrmacht Supreme Command (OKW) to begin planning for the invasion of Norway. Hitler emphasized that planning be kept to a very limited number of officers. "Study North" was assigned to three officers of Colonel Walter Warlimont's National Defense Department (L) of General Alfred Jodl's operations staff. "Jodl also discussed the invasion with the Chief of Staff, Air Force, presumably on the assumption that the Air Force would be predominant." When he briefed Hitler on 19 December, he was directed to keep the planning at OKW. 11 This was contrary to the normal German practice of the OKW providing strategic guidance and then assigning one of the services to plan and execute the campaign. 12 It was therefore the first important command and control decision of the campaign. (See Appendix A for a chronological list of important command and control decisions.)

Why did Hitler create this first OKW theater of war? Some have made the argument that Hitler wanted to centralize the conduct of the war under his direct control. Some argue that

Hitler had lost confidence in the Supreme Command Army (OKH) because of their desire to delay Fall Gelb. <sup>14</sup> As mentioned, Jodl had apparently considered the Supreme Command Air Force (OKL) for the mission, but Zeimke suggests that Hitler wouldn't put the OKL in charge because of a recent incident where an Air Force major carrying the plans to invade France had to make a forced landing in Belgium, allowing the plans to be captured. <sup>15</sup> Another possible explanation of this precedent comes from a group of German Officers after the war:

"Hitler was convinced that this combined operation in divergence from the procedure hitherto adhered to ought to be planned by OKW not only in broad outline but also in the details...1) The size and the difficulty of the operation meant any one service was not qualified to direct the other two; 2) It required close collaboration with the *Reichs* Ministry for Foreign Affairs; 3) Secrecy would be better; 4) Fall Gelb was occupying the Army Staff." 16

An equivalent decision in our joint planning is a three part process. First, should this mission be controlled directly by the National Command Authority? An example might be a special operations mission such as the Iranian hostage rescue attempt. If the mission is more appropriate for a Regional Commander in Chief (CINC), which gets the tasking? Usually the mission clearly falls into a Regional CINC's area, but there may be a campaign that straddles a boundary between two CINCs. An example of a more difficult choice was the decision to give the Guadalcanal operation to Admiral Nimitz vice General MacArthur. Guadalcanal was inside MacArthur's area, but since the operation was maritime and very close to Nimitz' area; Nimitz got the mission. The last step is to decide whether to keep the mission at the CINC level (such as Desert Storm) or to pass it down to a sub-unified command or joint task force (the more common practice).

Warlimont's initial study was presented to Hitler in late December but was not released to the services until 10 January. Because the Navy was the service most interested in the strategic objectives of the invasion and the least preoccupied with the invasion of France, they met from 14-19 January in order to study and refine *Studie Nord*. On 27 January, Hitler directed that one officer from each service be assigned to OKW for duty as the nucleus staff for the operation

now named Weserubung. <sup>18</sup> Since the senior officer of the staff was Captain Kranke from the Navy, and the Navy plan was the most developed, it was natural to expand the Navy plan as the baseline for planning when the "Kranke staff" met for the first time on 5 February. <sup>19</sup> The 16 February British attack on the Altmark (a German supply ship carrying British prisoners) in neutral Norwegian waters prompted Hitler to accelerate the planning process on 19 February, and name General Nikolaus von Falkenhorst (Army) as the commander of the campaign on 22 February. <sup>20</sup>

The selection of von Falkenhorst is the second major Command and Control decision.

General von Falkenhorst was selected for command of the campaign for three reasons. He was already a Corps Commander and could bring his existing staff. Some augmentation from OKW would be required. Secondly, von Falkenhorst had experience fighting in Finland in 1918 and that experience would be valuable in Norway. Lastly, he impressed Hitler when he interviewed for the job.

Finding an existing organization to build upon, picking a commander with relevant experience and interviewing to develop a common understanding of the mission are all steps reasonably applied to selection of a Joint Task Force (JTF) Commander today. Currently, the Pacific Theater provides an example where three service commands are used as nucleus JTFs. Army I Corps, Marine III MEF (Marine Expeditionary Force), and Navy 7th Fleet commanders and staffs are trained so the CINC can quickly select a commander appropriate for the mission and form a JTF. The arrangement facilitates trust and understanding in a crises by building on existing senior to subordinate relationships.

## **Detailed Planning**

The decision to include Denmark. Because the Germans would lack naval superiority, the first modification to the Kranke plan that von Falkenhorst and his staff submitted was for the inclusion of Denmark as part of Weserubung. The Luftwaffe argued correctly that they needed Aalborg on the Jutland peninsula in order to support the campaign and help isolate Norway by attacking British ships. <sup>21</sup> The inclusion of this implied task generated the next major Command

and Control decision. A subordinate task force was created under General Leonhard Kaupisch for the invasion of Denmark and the area of responsibility for von Falkenhorst was expanded to include Denmark. This is an excellent example of an implied task generating the requirement for not only more forces, but a change to the campaign geography and command structure.

Relationship to Fall Gelb. The forces required for Weserubung had grown to more than six army divisions and one air force paratroop division. The requirement to attack all the objectives simultaneously meant that the navy would need every ship it could put to sea for the campaign. It also meant that the initial ground forces would have to be well trained to make up for their geographic isolation and lack of numbers. There was a danger that the air force participation could potentially undermine the Western campaign. On 26 February, Jodl convinced Hitler to make Fall Gelb and Weserubung independent of each other "as regards timing and strength." The bottom line effect was that the air force paratroops were reduced from one division to about two battalions, and only one of the assigned army divisions had combat experience. Although the ground forces were independent of Fall Gelb, air forces were to be used for both campaigns, and navy forces would need to disengage quickly before the British responded in force.

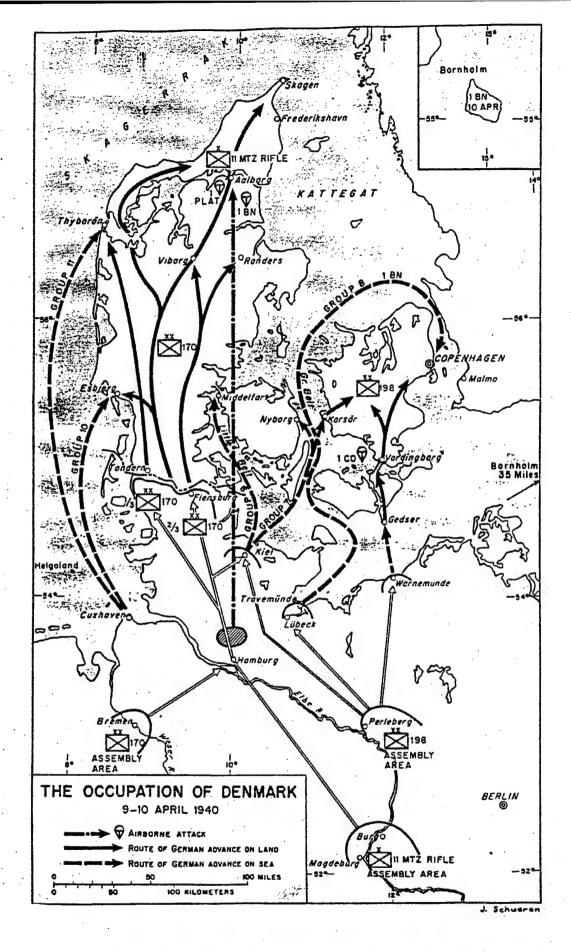
Operational Scheme. Before moving on to command relationships an outline of the operation scheme is necessary. The plan was complex. Surprise made it necessary to attack all the objectives simultaneously. Advance shipping for heavy equipment and logistics, plus submarines were to secretly sail before the main force. Units were staged and embarked from several ports. Initial assault forces (8,500 troops) would be embarked on warships. Another 8,000 would arrive by air transport in the first 3 days. The second wave of troops (via Oslo) was another 16,700. Once Jutland was occupied, it would provide interior lines of communication from Germany to Oslo for the 40,000 follow-on troops. The table below and Maps 2 and 3, show the complexity of the campaign.

Table 1: Objectives and Assigned forces for Weserubung

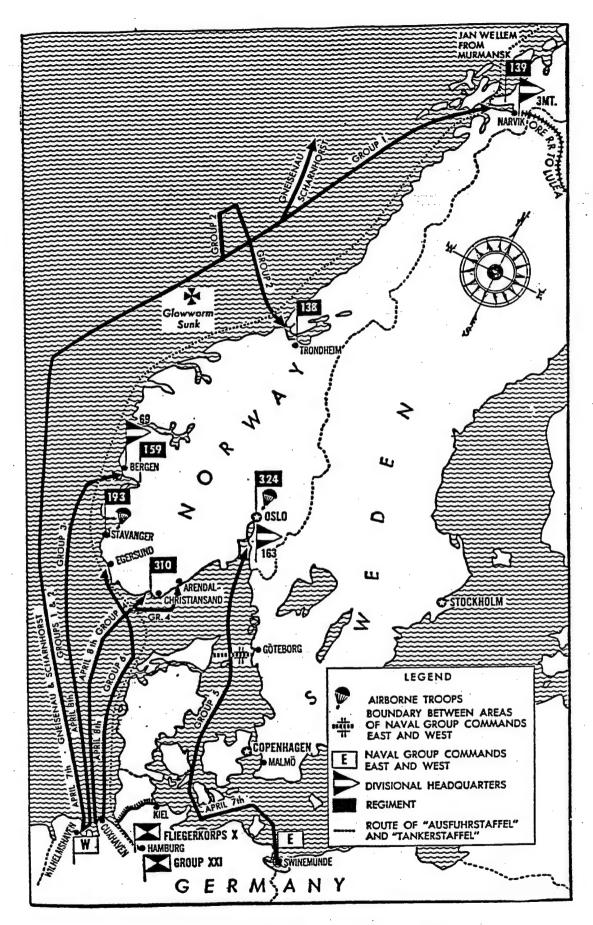
sp#	Objective	Airfield	depart from	Troops	Warships	Aircraft	Advance Ships	-
		Hartvik Lake	Weseimuende	2,000	Schamhorst,		3 Transports,	4
	va. viix			139th Regt,	Gneisenau,		2 Tankers	_
				3rd Mtn Div	10 Destroyers			
					·		2 Transports	2
2	Trondheim	Vaemes,		1,700		2 Recon Sqn	3 Transports	2
		Lake Jonsvand	Cuxhaven	138th Regt,	4 Destroyers	· · · · · · · · · · · · · · · · · · ·	2 Tankers	-
				3rd Mtn Div				
	-	. •		1	·			+_
3	Bergen	1	Wilhelmshaven	1,900	Koeln,	1 Recon Sqn	1 Tanker	5
	- Congest	*		159th Regt,	Koenigsburg,			<u> </u>
				69th Div	Bromse,			-
					Karl Peters,			
-					2 Torpedo Boats			<u>                                     </u>
_					5 "E" Boats			
4	Kristiansand	Kjevik	Weseimuende	1,100	Karlsrude,			
_	Arendal			310th Regt,	Tsingtau,			
	rucillal			163rd Div	3 Torpedo Boats			
					7 "E" Boats			
			-					<u> </u>
5	Oslo	Fornebo,	Swinemuende	2,000 by sea	Bluecher,	1 Fighter Sqn	2 Tankers	1
	CSIO	Kjeller	Kiel	1,000 by air	Luetzow,			<u> </u>
		ryellel	i de.	2 Co Paratroops	Emden,			_
				324th Regt,	3 Torpedo Boats			<u> </u>
		<b> </b>		163rd Div	2 Whaling Boats			<u> </u>
			-	TOOLS DIV	8 Minesweepers			
<u> </u>								
_	F	Cuxhaven		150 Bike Troops	4 Minesweepers			
6	Egersund			69th Div				1
	(cable station	}		OSCII DIV				
	Q	Sola		120 Paratroops		1 Fighter Sqn	1 Transport	2
NA	Stavenger	Sola	+	1,000 Air Landed		1 Dive Bomber Sqn	1 Tanker	
			<del> </del>	193rd Regt.		1 Bomber Sqn	-	
				69th Div				
				CSUI DIV	· · · · · · · · · · · · · · · · · · ·	· ·		T
			1.Gal	1,990	Schleswig-Holstein	<u> </u>		
7_	Kosor		Kiel	198th Div	2 Steamers,			
	Nyborg			19601 DIV	1 Torpedo Boat			
			-	<del> </del>	2 Minesweepers			1
		<del> </del>			Z Williesweepers			
-	Constitution		Travemuende	1,000	1 Motorship,			
8	Copenhagen		Haverinende	198th Div	1 Icebreaker			
	-		· · · · · · · · · · · · · · · · · · ·	TOOLI DIV	2 Picket Ships			
	/							
0	Middlefart	<del>                                     </del>	Kiel	400	1 Transport			
9	Middlerart	-	idei	170th Div	1 Minesweeper			
		1		17 Oct Div	· · · · · · · · · · · · · · · · · · ·			
4=			Cupharan	Small Navai	Minesweepers			
10	Esbjerg	1	Cuxhaven	Landing Party	- Incorrespond			
	1	1		Lanuing Faity		· · · · · · · · · · · · · · · · · · ·		

Table 1: Objectives and Assigned forces for Weserubung

Gp#	Objective	Airfield	depart from	Troops	Warships	Aircraft	Advance Ships	Subs
_	Tyboron		Cuxhaven	Small Naval	Minesweepers			
				Landing Party				
N/A	Vordingborg			1 Co Paratroops				
N/A	Gedser		Warnemuende	1 Bn, 198th Div	·			
N/A		Aalborg		1 Pit Paratroops		1 Fighter Group		
				1 Bn, 69th Div		2 Dive Bomber Sqn		
Subm	arine interdict	ion groups:						
-	Group North							6
-	Group South							3
	Petland Firth							2
Subm	arine SLOC p	rotection group	s:					
	Stavenger							2
	Naze							3
Sea tr	ransport squar	l dron ships:						
	Group One or	9 April include	d 14 ships, 4 for (	Oslo, 3 for Kristian	sand, 4 for Bergen	& 3 for Stavenger		
	Group Two or	11 April includ	ed 11 ships for O	slo				
	Group Three	on 15 April inclu	ided 13 ships for	Oslo				



Map 2 (Source: Ziemke, The German Northern Theater of Operations, 1940-1945, p 61)

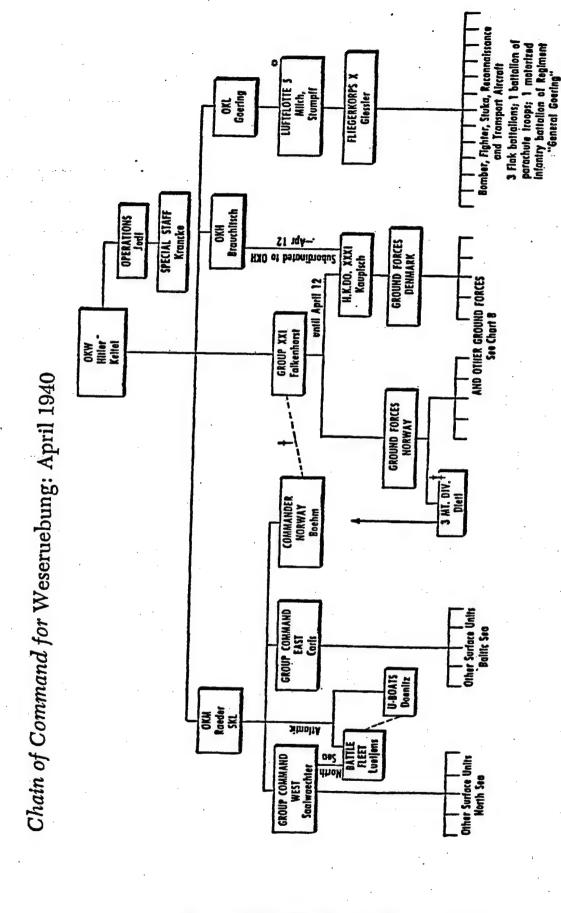


GERMAN INVASION OF NORWAY, APRIL 9, 1940. Map 3 (Source: Taylor, *The March of Conquest*, p 109)

Command and Control. Hitler, in his directive of 1 March, came very close to establishing a JTF. General von Falkenhorst, the commander of Group XXI, was given command of the air and navy forces assigned to the campaign. 25 Both Admiral Raeder, who had been the Commander in Chief of the Navy since 1927, and Hermann Goering, who was the Commander in Chief of the Air Force and next in line politically to Hitler, objected. Hitler backed down on 4 March, and made modifications to the command relationships. 26 The basic relationship (shown on page 14) is what we would call today a "supporting" relationship between von Falkenhorst and the Air Force or Navy. This command and control decision meant that unity of command would not be possible during Weserubung. General von Falkenhorst could expect cooperation, but did not have the authority to reconcile potential conflicts at his level. The best that could be expected was unity of effort. General von Falkenhorst developed that unity by incorporating the Kranke staff from OKW into his corps planning staff. 27 It provided liaison laterally to the services and upward to OKW. Additionally, the planning cells for Group XXI, X Air Corps, and Naval Intelligence were all co-located. 28

Political-Military relationship. Another serious challenge was the in theater political-military unity. The traditional German method of integrating the political operatives (what we would today call civil affairs) under the combatant commander was disregarded in this operation. Hitler wanted to separate the military and political/economic missions and in this case the chosen *Reichskommissar*, Joseph Terboven, would report directly to Hitler. The normal reporting chain for commissioners was via the Foreign Ministry. More will come later on this political-military division of labor, but during the planning phase discussion, it is enough to recognize that relationships with ambassadors or other political actors is an important command and control decision. It must be clearly established.

Command and Control of geographically isolated forces. Both the operational scheme consisting of simultaneous attacks on multiple objectives, and the geography of Norway dictated some special command and control measures. The previous table and maps illustrate the need for decentralized execution. General von Falkenhorst could not expect to supervise the initial phase

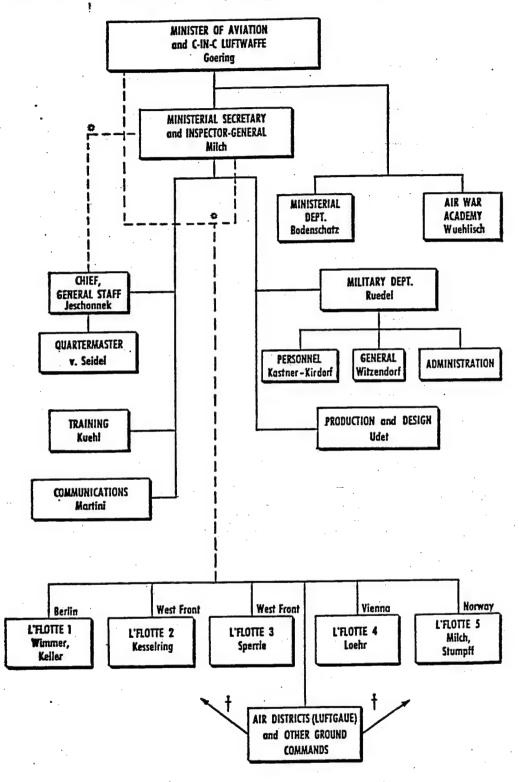


Source: Taylor, *The March of Conquest*, p 424

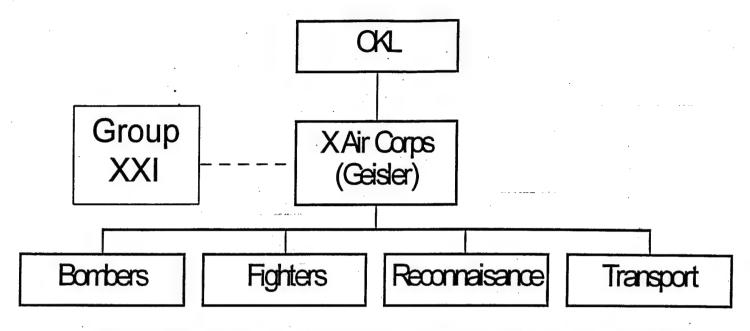
of the assault. In order to provide unity of command at each objective area, the senior officer present at any one geographical location was given emergency authority to command forces regardless of service. As a demonstration of the importance of the campaign and a clear understanding of these relationships, Hitler personally interviewed each of the local army, navy, and air force commanders about their role in the assault.

Command and Control of Air Forces. X Air Corps, consisting of 1,000 planes, was assigned to support Weserubung. Three important decisions were made regarding command and control of the air forces. The first decision already discussed was that von Falkenhorst did not command the air forces. The second decision involved command and control of the first use of German paratroops. During the transport phase of paratroop employment, they would be commanded by the transport aircraft commander. Once committed to combat, they would be commanded by the army commander responsible for that geographic objective because the Army would be the predominant ground component. Those paratroops in theater but not yet committed would be commanded by the Air Force Headquarters Command, who also commanded security forces and anti-aircraft artillery. The third decision was whether to allow X Air Corps to independently command air forces in theater or to establish V Air Fleet. (At the time the Luftwaffe had 4 standing air fleets with geographic responsibilities.) General Ulrich Kessler, Chief of Staff of X Air Corps wrote after the war that X Air Corps was adequate for the prosecution of the air operations. He also believed that V Air Corps was formed for the political purpose of providing field command experience for General Erhard Milch, who was then Goering's deputy. 30 The counter argument would be that coordination with other air fleets, as well as the functions related to bases, logistics and administration of a theater air force were jobs beyond the scope of an air corps. Today, campaign planners must make similar decisions about origination of air forces and relationships to other components. In addition, since multiple components in the U.S. have aircraft, we must further decide who will command the integrated air effort (Joint Force Air Component Commander). The organization of the Luftwaffe and the chain of command before and after the establishment of V Air Fleet are shown below.

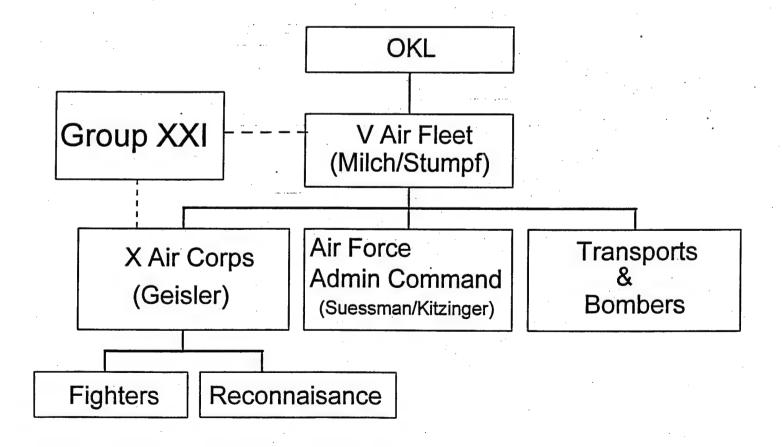
# Oberkommando der Luftwaffe (OKL): April 1940



# Luftwaffe Organization before 12 Apr, 1940



Luftwaffe Organization after 12 Apr, 1940

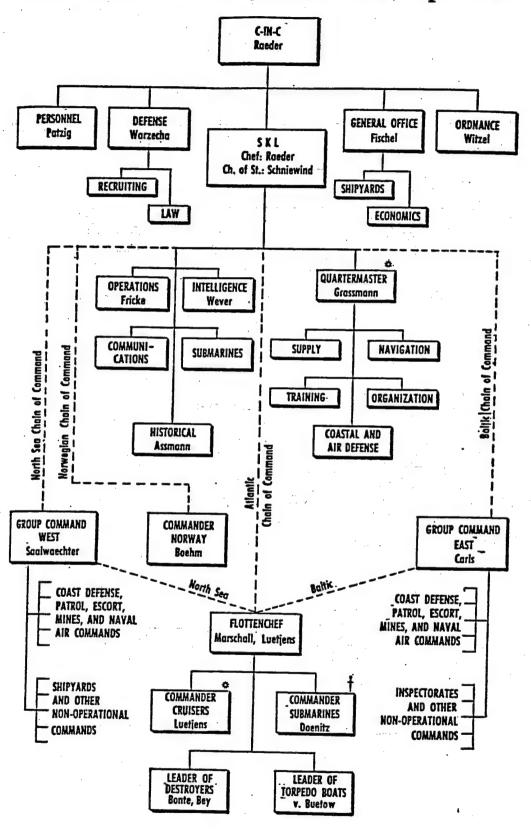


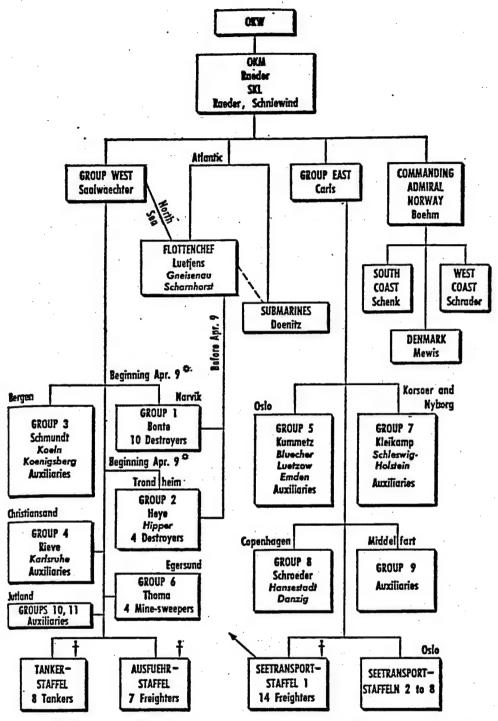
Navy command and control. The navy faced a less complicated command and control problem because their job was to get the forces to the objectives and quickly disengage before the British could bring them to battle. One command and control problem for them was coordinating submarine and surface forces, something that had not been done in the past (and still a technological challenge). The assignment of submarines to objectives depicted in Table 1 was the German mechanism used to give the surface group commander a measure of control over the submarines.

Another command and control problem was the existing friction between the Navy and Air Force. Goering and Raeder had a longstanding disagreement about control of land based air in support of maritime operations. The failure of Hitler to give command of both forces to Group XXI was a potentially serious problem because General von Falkenhorst did not have the authority to resolve disagreements locally. Similar to the relationship between air force transports and paratroops, the navy surface transport units had command of the embarked troops until the landing. After the landings, the Navy was responsible for port defense from seaborne attacks.

The last and most contentious issue was that of naval surface fire support. Both Hitler and Goering argued that destroyers should remain behind at Narvik and Trondheim in order to provide surface fire support for the infantry because it would be initially difficult to provide air support in the two most northern objectives. <sup>31</sup> Based on Reader's objections, Hitler finally agreed to let Raeder decide when to withdraw his destroyers. The following diagrams show the overall navy command structure, and the structure for *Weserubung*. The decisions made by the Germans have some parallels to current doctrinal discussions. In a littoral operation, who is in charge; the navy transport commander or the ground forces commander? If it is the ground force commander, the naval support problem is solved by default. If it is the navy commander, what is the risk criteria used for disengagement of support ships? Since the Germans had no carriers, carrier air wasn't an issue for them, but the same command and control decision process needs to be applied when discussing carrier air. Who does it work for, and when does it disengage? Coordinating those decisions is an enduring littoral command and control problem.

# Oberkommando der Kriegsmarine (OKM): April 1940





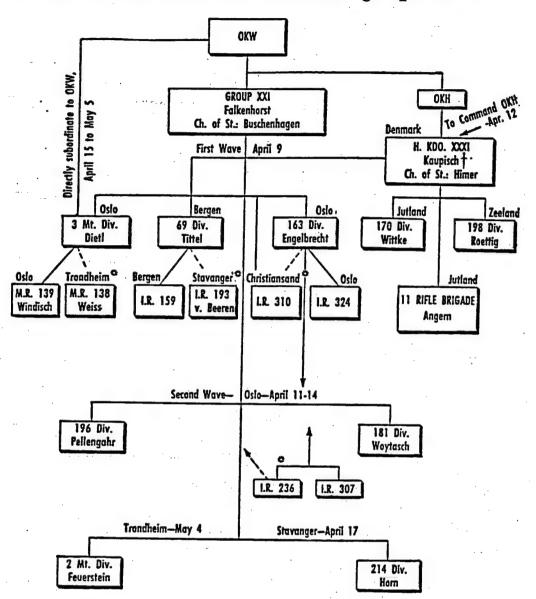
• Groups 1 and 2 sailed with the *Gneisenau* and *Scharnhorst*, and were under the *Flottenchef's* command until the Groups approached their destinations.

† Of the Ausfuehrstaffel, three ships each for Narvik and Trondheim and one for Stavanger. Of the Tankerstaffel, two ships each for Narvik, Trondheim, and Oslo, and one each for Bergen and Stavanger. Of the fourteen ships of Seetransport Staffel I, four were for Oslo and ten for Christiansand, Stavanger, and Bergen. These ten came under command of Group West when they passed out of the Cattegat into the Skagerrak.

Army command and control. The Army chain of command is shown below but would not really be in effect until Group XXI could establish control over all of Norway. As mentioned before, individual objectives would be initially independent. XXXI Corps, the forces for the occupation of Denmark, were to be under the command of General von Falkenhorst until the third day of the operation, when OKH would assume command. This command and control decision was a brilliant recognition that Denmark in the long term was geographically more aligned with the Western Theater of Operations, but that it was in the short term a supporting operation to General von Falkenhorst's campaign.

The decision to limit Group XXI to only one combat experienced division also affected army command and control. General von Falkenhorst decided to use his best division (3rd Mountain) to attack both Trondheim and Narvik, even though another division would eventually be used for the occupation and defense of Trondheim. The decision to complicate the arrival of follow on forces with a relief in place, followed by the need to transport the 138th Regiment from Trondheim to Narvik was favored over the risk of using an untested unit to attack Trondheim.

## Army Order of Battle for Weseruebung: April 1940



- The regiments landed at Trondheim, Stavanger, and Christiansand operated independently until their own or another divisional headquarters was able to exercise effective command. Infantry Regiments 236 of the 69th Division and 307 of the 163rd Division, landed at Oslo in the second wave, were both subordinated to the 163rd Division.
- † Kaupisch's forces also included an ad hoc formation of three companies of light tanks (Panzer Abteilung 40), and three motorized machine-gun battalions. These, as well as the battalion of the "General Goering" Regiment (a Luftwaffe formation, under the Army's tactical command), were transported to Norway about the middle of April, to reinforce the 163rd and 196th Divisions for their campaign in central Norway.

### Execution

Weserubung was a very successful campaign. Unity of effort was able to overcome the lack of unity of command. With the exception of capturing the King of Norway, the objectives were accomplished quickly and the remnants of the Norwegian army surrendered within 60 days. The government and army of Denmark capitulated within hours. Even with Allied counterattacks at Narvik, Namsos and Andalsnes, German casualties were light in World War II terms (1,317 killed, 1,604 wounded, and 2,375 missing). However, even the most successful plans require interaction with the enemy and this section will discuss German reactions as the campaign unfolded.

Command and Control. On 10 April, Group XXI and X Air Corps moved to Oslo. The naval forces headquarters also moved (although they really didn't command anything except port operations). V Air Fleet was established in Oslo on 12 April to support all Scandinavian operations and X Air Corps responsibilities were limited to close air support and interdiction. Since the Allies opposed only the two Northern objectives at Trondheim and Narvik by counterattack, the focus of Group XXI shifted Northward. On 5 May, once communications between Olso and Trondheim were secure, Group XXI and X Air Corps moved to Trondheim. They were in a better position to support the ongoing fight at Narvik and the strategic objectives of the campaign. By June the fighting was over and the Command and Control structure remained in place for the remainder of the war. Below are four anecdotal examples of how the German lack of unity of command complicated execution.

(1) V Air Fleet. Without taking exception to the eventual formation of V Air Fleet, 12 April was too soon to establish it. Changing command relationships while the fighting is still heavy is an accident waiting to happen. An example of how this lead to uncoordinated activities was the drop of 200 paratroops in Dombaas. That well intentioned decision to secure railroad lines of communication between Olso and Trondheim was not coordinated to provide a link-up with Group XXI ground forces moving up from Oslo. Those paratroops were subsequently captured by the Allies. As a theater expands it may become necessary to establish adjacent and

higher headquarters, but command and control arrangements are better adjusted during an operational pause or between phases of an operation.

- (2) Command at Narvik. Narvik was the most distant and arguably the most important objective of the campaign. General Eduard Deitl, the commander of 3rd Mountain Division and a personal friend of Hitler<sup>32</sup> was assigned this objective. When the Allies counterattacked Narvik with over 20,000 troops (to Deitl's 2,000 soldiers and 2,600 sailors from the sunken destroyers), Hitler and the OKW took command of operations in Narvik away from Group XXI. At that point, General von Falkenhorst didn't have the ability to command and control General Deitl's forces, nor the ability to support him. Although there is a good deal of criticism about how Hitler "panicked"<sup>33</sup> during this time, the basic decision seems reasonable. There may be times during a campaign when geographically separate forces need to be assigned to an adjacent or higher headquarters. After Group XXI moved to Trondheim on 5 May, OKW returned command and control of Narvik to General von Falkenhorst.
- (3) Priority of Air. After the move to Trondheim there was a typical disagreement between X Air Corps and Group XXI about how best to support the Narvik objective.

  Predictably, Group XXI wanted the priority of air support to go directly to General Deitl in Narvik. Equally predictably, X Air Corps wanted to interdict British shipping and air capabilities in order to support Narvik indirectly. Because X Air Corps was only "in support of" Group XXI, General von Falkenhorst had to appeal to V Air Fleet. If they had not been able to agree, the next step would have been to request OKW intervention. The fact that General von Falkenhorst won the argument and changes were made to the X Air Corps leadership are not the real lessons.

  Since air forces and ground forces tend to view battlefield priorities differently, conflicts about apportionment and priorities are facts of life. The important lesson is that the JTF needs local control over those decisions.
- (4) Political-Military difficulties. During execution of Wesurubung, the military complained of a lack of unity between Group XXI and the Reichskommissar. The complaint was based on "German doctrine that, in a zone of operations, the commanding general of an army

exercised the executive power as long as operations were in progress."<sup>34</sup> Aggravating the problem was the personality and "heavy handed" approach of Terboven. <sup>35</sup> The army argued that his style was incompatible with the goal of creating a benign relationship with the Norwegian population. An active underground movement would be counterproductive to the post invasion administration of bases and logistics. The second complaint was the lack of equal access to Hitler. When a disagreement needed resolution, Terboven could go directly to Hitler, but General von Falkenhorst was screened through the OKW. <sup>36</sup> Although, in some cases (Major Theater War) it may make sense for the political activities within theater to be subordinate to the military commander, there are equally valid occasions for political seniority (Operations Other Than War). The lesson is to have a clearly defined relationship, and a plan for quickly arbitrating inevitable differences.

#### Conclusions

The creation of the first **OKW** Theater of War for *Weserubung* was appropriate. None of the three services was in a position to supervise the others. In the case of the Army it was because they were too busy with *Fall Gelb*. In the case of the Navy and Air Force, the personal animosity between Goering and Raeder would have probably soured any unity of effort. In addition, the Navy planned to disengage from the campaign as quickly as possible and the Air Force was heavily involved in the planning of *Fall Gelb* with the Army.

The selection of General von Falkenhorst as the commander was appropriate. Picking a commander with experience in similar conditions gives him credibility and saves time learning about the operational environment. The fact that he brings an experienced staff is a bonus. All his staff needed was some augmentation from officers familiar with air and navy operations. His interview with Hitler provided understanding of the mission and trust between the national command authority and the operational commander.

Correct decisions were made with respect to the relationship between Fall Gelb and Weserubung. Fall Gelb remained the German focus of effort and the decisions about forces to be assigned and their command relationships flowed from that focus. The decision to keep Fall

Gelb and Weserubung independent of each other was appropriate because during the planning phase it was not known whether Weserubung would be complete before Fall Gelb was initiated. The adjustment of the area of operations to include XXXI Corps' invasion of Denmark was appropriate because of the need to secure the Aalborg airfield and interior lines of communications. It was appropriate to shift command of XXXI Corps to the OKH after the occupation was complete and no longer required detailed coordination with von Falkenhorst.

The arrangements for local commanders for each objective with emergency authority over any service was appropriate. Norway is an excellent example of an area where the terrain creates conditions where centralized control is difficult. The distances between objectives with simultaneous timetables for assault also required decentralized command and control. Similarly, the decision by Hitler to directly control Narvik was appropriate because von Falkenhorst's Group XXI was not yet in a position to support Deitl. Once Group XXI moved to Trondheim, command of Narvik was correctly returned to General von Falkenhorst.

The failure to subordinate political, navy and air forces to von Falkenhorst adversely affected the unity of effort. At least until the Norwegian Army surrendered, von Falkenhorst should have had control over Terboven. He also should have had command over the navy and air forces assigned to his theater. Recognizing that navy and air forces can easily move in and out of theater to respond to more pressing national priorities, command of those forces while in theater prevents disjointed efforts such as the parachute landing at Dombaas and delays while sorting out the allocation and priority of air assets.

The establishment of two additional air force headquarters' was inappropriate on 12 April, especially if done to create a command opportunity for General Milch. It complicated coordination for General von Falkenhorst in the middle of his effort to consolidate Oslo and to push north toward Trondheim. His staff had to coordinate with X Air Corps for close air support and interdiction but had to coordinate with V Air Fleet for transport, reconnaissance, anti-aircraft artillery and paratroops.

Hitler failed to settle the question of when navy forces could disengage from an objective area. In this campaign, there was no adverse result because in both Narvik and Trondheim, planning was overtaken by events. The forces in Narvik were unable to disengage because of lack of fuel, and the minimal requirements for surface fire support in Trondheim were provided.

#### Lessons Learned

When selecting what CINC gets assigned a mission and who will lead the JTF, personalities matter. Those decisions cannot be taken out of the context of recent events. Hitler's dissatisfaction with the Army contributed significantly to the retention of control over Weserubung at the OKW level. The choice of a commander with relevant experience and an existing staff is smart.

Personalities and bureaucratic politics can always affect command and control relationships established between the various services. Both Raeder and Goering had the ability to strongly influence Hitler, but in the Army or OKW there was no personality strong enough to convince Hitler to subordinate the Air Force and Navy to von Falkenhorst. Unity of Command is a desired condition, but a commander can be successful with unity of effort. In this case Hitler himself contributed to the unity of effort by showing his personal interest and involvement in the campaign.

Adjusting operational boundaries is an easy way to facilitate coordination between dependant operations. Assigning command of XXXI Corps to Group XXI for the first three days of the campaign ensured that General von Falkenhorst had direct coordination with XXXI Corps and timely information about the progress of achieving the Danish objectives.

Establishing additional headquarters' and changing command and control relationships during an operational phase of a campaign can create confusion. The establishment of V Air Fleet and the Air Force Headquarters Command before Norway was secure aggravated unity of effort. The Air Fleet and Headquarters Command should have been established in June after the Allies withdrew and the Norwegian Army ceased fighting.

In littoral campaigns, everyone must understand when the navy support will disengage. The criteria should be based on a balance between risk to the ships and risk to the campaign objective. The disengagement criteria should be approved by the JTF commander. Ground force commanders must have the ability to compensate for loss of naval support through either phasing fire support ashore or arranging air support. Allowing the navy commander to unilaterally decide when to disengage may save ships but endanger the campaign objective.

Relationships with political participants need to be clearly established. In war, the political activities should support the campaign objectives. In "Operations Other Than War," there is a good argument for the opposite relationship. Interagency relationships are just as important as inter-service relationships because they can help or hinder the campaign.

A plan for command and control of airborne (or amphibious) forces must be developed. With airborne forces; who will they work for after the link-up with other ground forces and how will that be coordinated? In this campaign (since the number of paratroops was small) the Germans clearly articulated that the air transport group commander would command paratroops during the transport phase, but once on the ground, they would be commanded by the senior ground commander. For our joint planners a similar decision must be made with Marines. After phasing ashore, will the Marines become subordinate to the Ground Forces Commander or become their own component? What coordinating instructions are required for the transition?

### **Epilogue**

The study of Weserubung is instructive in numerous ways. Because of space constraints, this paper only focused on issues of German command and control. Weserubung was an example of an "ad hoc" organization operating in a peripheral campaign. General von Falkenhorst had to accomplish his mission without naval superiority or his first choice of ground forces. He also had to plan for command and control of the simultaneous assault of 15 geographically separate objectives. He was unable to enjoy unity of command of military forces or political representatives. Although he had air superiority, he had to coordinate with both X Air Corps and V Air Fleet. Despite his sub-optimal command and control organization, the campaign was a

success. This pioneering German effort to coordinate the efforts of land, sea and air forces in what could be considered the first modern campaign, can help us think through our own decisions when building command and control relationships that facilitate joint operations.

#### **NOTES**

<sup>1</sup>Williams, George B., Blitzkrieg and Conquest: Policy Analysis of Military and Political Decisions Preparatory to the German Attack upon Norway, April 9, 1940, (PHD Thesis published by University Microfilms, Inc., Ann Arbor, Michigan), Yale University, 1966, p 115.

<sup>2</sup>U.S. Military Academy, *The Campaign in Norway*, West Point, NY, 1945, p 1.

<sup>3</sup>Maier, Klaus A., & Rohde, Horst, & Stegemann, Bernd, & Umbreit, Hans, Germany and the Second World War, (translated by McMurry and Osers), Clarendon Press, Oxford, 1991, pp 188-189.

<sup>4</sup>Showell, Jak P. Mallman, Fuehrer Conferences on Naval Affairs 1939-1945, Naval Institute Press, Annapolis, MD, 1990, p 62.

<sup>5</sup>Ziemke, Earl F., "The German Decision to Invade Norway and Denmark," Command Decisions, Center for Military History, U.S. Army, Washington, D.C., 1990, p 41.

<sup>6</sup>Derry, T. K., *The Campaign in Norway*, Her Majesty's Stationery Office, London, 1952, p 7. 

<sup>7</sup>Showell, *Fuehrer Conferences on Naval Affairs*, pp 47, 98 and Assmann, Kurt, (VADM Former German Navy), "The German Invasion of Norway, 1940," *U.S. Naval Institute Proceedings*, April, 1952, p 401.

<sup>8</sup>Taylor, Telford, The March of Conquest, The German Victories in Western Europe, 1940, Simon and Schuster, New York, 1958, p 83.

<sup>9</sup>Williams, p 225.

<sup>10</sup>Ziemke, Earl F., *The German Northern Theater of Operations 1940-1945*, (DA Pamphlet No. 20-271), Department of the Army, Washington, D.C., 1959, pp 7-10.

<sup>11</sup>Ibid, p 10.

<sup>12</sup>Williams, p 330-5.

<sup>13</sup>Williams, pp 511-514.

<sup>14</sup>Taylor, p 56.

<sup>15</sup>Ziemke, (in Command Decisions), p 58.

<sup>16</sup>Detwiler, Donald S., World War II German Military Studies, (24 Volume Garland Series), Garland, New York & London, 1979, (Vol IV, "Armed Forces Matters"), pp 24-25.

<sup>17</sup>Ziemke, (in *DA Pamphlet 20-271*), p 12.

<sup>18</sup>Derry, p 18.

<sup>19</sup>Ziemke, (in *Command Decisions*), p 12 and Hooker, Richard D., & Coglianese, Christopher, "Operation Weserubung and the Origins of Joint Warfare," *Joint Forces Quarterly*, (No. 1, Summer 1993), NDU, Washington, D.C., pp 102-4, and Kersuady, Francois, *Norway 1940*, Collins & Sons, London, 1990, p 44.

<sup>20</sup>Kersaudy, pp 44-6.

<sup>21</sup>Williams, p 527, and Taylor, p 94.

```
<sup>22</sup>Ziemke, (in Command Decisions), p 62.
```

<sup>&</sup>lt;sup>23</sup>Taylor, p 95.

<sup>&</sup>lt;sup>24</sup>Williams, p 535.

<sup>&</sup>lt;sup>25</sup>Ibid, p 541.

<sup>&</sup>lt;sup>26</sup>Ibid, pp 556-7.

<sup>&</sup>lt;sup>27</sup>Taylor, p 91.

<sup>&</sup>lt;sup>28</sup>Williams, p 561:

<sup>&</sup>lt;sup>29</sup>Kersaudy, p 48.

<sup>&</sup>lt;sup>30</sup>Detwiler, WWII German Military Studies Series, (Vol 23, "Role of the Luftwaffe in the Campaign in Norway, 1940), p 9-10. (Geissler's argument about "ticket punching" is substantiated by the replacement of Milch by Stumpf on 5 May)

<sup>&</sup>lt;sup>31</sup>Ziemke, (in *DA Pamphlet 20-271*) p 29.

<sup>&</sup>lt;sup>32</sup>Taylor, p 123.

<sup>&</sup>lt;sup>33</sup>Ziemke, (in *DA Pamphlet 20-271*), p 63.

<sup>&</sup>lt;sup>34</sup>Ziemke, (in Command Decisions), pp 58-9.

<sup>&</sup>lt;sup>35</sup>Assmann, p 243.

<sup>&</sup>lt;sup>36</sup>Detwiler, WWII German Military Studies Series, (Vol V, Annex 22, "German Military Policy in Norway"), pp 5-9.

### **Bibliography**

- 1. Andenaes, Johs., Riste, O., and Skodvin, M., Norway and the 2nd World War, Oslo, 1966.
- 2. Assmann, Kurt, (Vice Admiral, former German Navy), "The German Invasion of Norway, 1940," U.S. Naval Institute Proceedings, April, 1952.
- 3. Brookes, Ewart, Prologue to a War, Jarrolds, London, 1966.
- 4. Buckley, Christopher, Norway The Commandos Dieppe, His Majesty's Stationary Office, London, 1951, (2nd World War, 1930-1945 Series).
- 5. Derry, T.K., The Campaign in Norway, Her Majesty's Stationery Office, London, 1952.
- 6. Detwiler, Donald S., World War II German Military Studies, (24 Volume Garland Series), Garland, New York & London, 1979.
- 7. Elting, John R., Battles for Scandinavia, Time Life Books, Alexandria, VA, 1981, (WWII Time Life Series).
- 8. Kersuady, Francois, Norway 1940, Collins & Sons, London, 1990.
- 9. Koht, Halvdan, Norway, Neutral and Invaded, McMillan, N.Y., N.Y., 1941.
- 10. Hooker, Richard D., & Coglianese, Christopher, "Operation Weserubung and the Origins of Joint Warfare," Joint Forces Quarterly, (No. 1, Summer 1993), NDU, Washington, D.C.
- 11. Maier, Klaus A.; Rohde, Horst; Stegemann, Bernd; & Umbreit, Hans, Germany and the Second World War, (translated by McMurry and Osers), Clarendon Press, Oxford, 1991.
- 12. Showell, Jak P. Mallman, Fuehrer Conferences on Naval Affairs 1939-1945, Naval Institute Press, Annapolis, MD, 1990.
- 13. Taylor, Telford, The March of Conquest, Simon and Schuster, New York, 1958.
- 14. U.S. Military Academy, The Campaign in Norway, West Point, NY, 19454.
- 15. Williams, George B., Blitzkrieg and Conquest: Policy Analysis of Military and Political Decisions Preparatory to the German Attack upon Norway, April 9, 1940, (PHD Thesis published by University Microfilms, Inc., Ann Arbor, Michigan), Yale University, 1966.
- 16. Ziemke, Earl F., *The German Northern Theater of Operations 1940-1945*, (DA Pamphlet No. 20-271), Department of the Army, Washington, DC, 1959.
- 17. Ziemke, Earl F., "The German Decision to Invade Norway and Denmark," Command Decisions, Center for Military History, U.S. Army, Washington, D.C., 1990.

# Table 2: Command and Control Decisions for Weserubung

Date	Decision
14 Dec 39	Hitler directs OKW to study possibility of invading Norway
19 Dec 39	Hitler directs Jodl to keep planning at OKW
27 Jan 40	Hitler directs formation of the "Kranke staff" at OKW
19 Feb	Hitler accelerates planning after the Altmark incident
21 Feb	Hitler interviews General von Falkenhorst
22 Feb	General von Falkenhorst named Commander Group XXI
26 Feb	Hitler agrees to make Fall Gelb and Weserubung "independent"
29 Feb	Denmark added, XXXI Corps subordinated to Group XXI
1 Mar	Hitler issues orders assigning command of all forces to von Falkenhorst
4 Mar	Hitler modifies 1 Mar order to allow OKL to command air forces and OKM to command navy forces.
14 Mar	Explains the concept of geographic objective commanders with emergency authority over all local forces. Navy in charge of amphibious forces during transit and air force transport commander in charge of paratroops during transit
2 Apr	Hitler approves the 9 Apr invasion date
12 Apr	OKH assumes command of XXXI Corps (Denmark)
12 April	V Air Fleet (and Air Force HQ Command) established
15 Apr	Command of Narvik objective assumed at OKW
19 Apr	Terboven appointed Reichskommissar (to report directly to Hitler)
5 May	Group XXI moves to Trondheim, re-assumes command of Narvik
5 May	Some Air Forces shifted to Germany for Fall Gelb
15 May	Disagreement between X Air Corps and Group XXXI about use of air